

228-522

05/04/2015

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MAY - 4 2015

Mr. Nathan P. Ehresman
Director, Regulatory Affairs
Nufarm Americas, Inc.
4020 Aerial Center Parkway
Morrisville, NC 27560

Subject: Notification per PRN 98-10 – Add an Alternate Brand Name
Product Name: SENATOR® 600 FS
EPA Registration: 228-522
Application Date: April 14, 2015
Decision Number: 503682

Dear Mr. Ehresman:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records. The alternate brand name NUPRID 600 FS has been added to the product record.

If you have any questions, you may contact Melody Banks at 703 305 5413 or via email at Banks.Melody@epa.gov.

Sincerely,

Melody Banks
Environmental Protection Specialist
Invertebrate and Vertebrate Branch 3
Registration Division (7505P)

SENATOR® 600 FS

FOR USE AS A SEED TREATMENT TO PROTECT THE SEED OF LISTED CROPS AGAINST LISTED PEST **NOTIFICATION**

[ALTERNATE BRAND NAME: NUPRID 600 FS]

MAY - 4 2015

ACTIVE INGREDIENT:

Imidacloprid..... 48.7%

OTHER INGREDIENTS:51.3%

TOTAL: 100.0%

Contains 5 pounds active per gallon (600 grams per liter) @ 20°C.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300
For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 228-522
EPA EST. NO. _____

MANUFACTURED FOR
NUFARM AMERICAS INC.
11901 S. Austin Avenue
Alsip, IL 60803



NET CONTENTS _____

GALS. (_____ Liters)

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Avoid contact with eyes or clothing.

FIRST AID	
IF INHALED	<ul style="list-style-type: none"> • Move the person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • DO NOT induce vomiting unless told to do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.	
NOTE TO PHYSICIAN	
No specific antidote is available. Treat the patient symptomatically.	

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks.
- Protective eyewear

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is highly toxic to birds and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. Cover or incorporate spilled treated seeds.

Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use in commercial seed treatment facilities. Use is also permitted as an end-use seed treatment on agricultural establishments at planting, or immediately before planting, as specified in the Specific Crop Use Directions. This product is to be used in liquid or slurry treaters only.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Mix thoroughly before use or use entire container at one time. All tank mixes should be pre-tested to determine physical compatibility between formulations. Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

One fluid ounce of this product contains 17.7 grams imidacloprid

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the **restricted-entry interval (REI) of 12 hours.**

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks
- Protective eyewear

ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. The following plant-back intervals must be observed for listed crops.

ROTATIONAL PLANT-BACK INTERVALS*				
IMMEDIATE PLANT-BACK				30-DAY PLANT-BACK
Artichoke	Crambe	Oats	Soybean	Cereals, including buckwheat rice
Barley	Cucurbits	Okra	Strawberry	
Borage	Eggplant	Pepinos	Sugarbeet	
Brassica (cole) leafy vegetables	Flax	Pepper	Sunflower	
Bulb vegetables	Groundcherry	Popcorn	Tomatillo	
Canola	Leafy petiole vegetables	Potato	Tomato	
Cilantro	Leafy vegetables	Rapeseed	Triticale	
Corn, Field	Legume vegetables	Rye	Root and Tuber vegetables	
Corn, Sweet	(succulent or dried, including Soybean)	Safflower	Watercress	
Cotton	Millet	Sorghum	Wheat	
Cranberry	Mustard seed			

* Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.
 * For all other crops not listed on an imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, a 12-month plant-back interval must be observed.

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NOTIFICATION of the crop rotational restriction must be conveyed to the grower by appropriate seed tag labeling or bag printing on all seed units.

NOTE: The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye or colorant added to treated seed must be cleared for use under 40 CFR, Part 180.1001. Federal regulations have established official tolerances for certain pesticide residues. In order that residues on food and forage crops will not exceed established tolerances, use only at specified rates.

Treated seed must not be used for or mixed with food or animal feed or processed for oil. Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act.

USE RESTRICTIONS

- **DO NOT** use as a planter (hopper) box treatment.
- **DO NOT** use treated seed for feed, food, or oil purposes.
- Store treated seed away from feeds and foodstuffs.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- The maximum application rate for imidacloprid (including seed treatments, foliar applications, soil applications) is 0.5 lbs per acre per calendar year. **DO NOT** apply more than 0.5 lbs ai imidacloprid per acre per calendar year.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seed. Excess or leftover seed may be double-sown around the headland or buried away from bodies of water in accordance with local requirements.

SEED BAG LABELING REQUIREMENTS

Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. The user of this product is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEEDS BE LABELED WITH THE FOLLOWING STATEMENTS:

- This seed has been treated with SENATOR 600 FS (imidacloprid)
- **DO NOT** use for feed, food, or oil purpose.

THE US ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON BAGS CONTAINING SEEDS TREATED WITH SENATOR 600 FS (imidacloprid)

- Pollinator Precautions: Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seeds. Excess or leftover seed may be double-sown around the headland or buried away from bodies of water in accordance with local requirements.
- Dispose of seed packaging in accordance with local requirements.
- **DO NOT** contaminate water bodies when disposing of planting equipment wash water.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- In the event of a crop failure or harvest of a crop grown from SENATOR 600 FS treated seed, the field may be replanted immediately to artichoke, barley, borage, Brassica (cole) leafy vegetables, bulb vegetables, canola, cilantro, corn (field or sweet), cotton, cranberry, crambe, cucurbits, eggplant, flax, groundcherry, leafy petiole vegetables, leafy vegetables, legume vegetables (succulent or dried including soybean), millet, mustard seed, oats, okra, pepinos, pepper, popcorn, potato, rapeseed, rye, safflower, sorghum, soybean, strawberry, sugarbeets, sunflower, tomatillo, tomato, triticale, root and tuber vegetables, watercress, and wheat. For cereals including buckwheat, and rice; the minimum plant-back interval is 30 days from the date SENATOR 600 FS treated seed was planted. Cover crops for soil building or erosion control may be planted at any time; but do not graze or harvest for food or feed. For all other crops not listed on an imidacloprid label, or for crops for which no imidacloprid tolerance for the active ingredient has been established, a 12-month plant-back interval must be observed.
- The maximum application rate (including seed treatment, foliar application, and soil application) per acre per calendar year for imidacloprid is 0.5 lbs.
- This seed has been treated with X lbs imidacloprid per lbs of seed [or X mg imidacloprid per seed].
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticides remain in the ethanol by-products that are used in agronomic practice.

SPECIFIC CROP USE DIRECTIONS

CARROT:	
To provide early season protection of seedlings against injury by listed pests, apply as a commercial seed treatment.	
For Use In Commercial Seed Treatment Facilities	
Target Pest:	Fluid Ounces Product / 100 lb seed
Seed corn maggot Wireworm	6.4

CORN:	
For the protection of corn plants from the corn insect pests listed below, apply as a seed treatment at the specified rates.	

Field Corn				
For Use In Commercial Seed Treatment Facilities				
Target Pests:	Fluid Ounces of Product /			MG AI / SEED
	100 lb seed*	1000 seeds	80,000 seed count	
Corn root worm (including Northern, Western, Southern and Mexican ¹) Flea beetle Chinch bug Southern green stinkbug White grub Seed corn maggot Thrips Wireworm Corn leaf aphid Imported fire ant Southern corn leaf beetle Billbug ² Grape colaspis ² Black cutworm ³	13.5	0.076	6.05	1.34
Flea beetle Chinch bug Seed corn maggot Thrips Wireworm Corn leaf aphid Imported fire ant Grape colaspis ² White grub	6.0	0.034	2.69	0.60
Seed corn maggot (seed protection only) Wireworm (seed protection only) Flea beetle (through 1 leaf stage) Imported fire ant White grub ⁴	1.6	0.009	0.72	0.16

This product contains 17,700 mg imidacloprid (AI) / fluid ounce.

*based on a standard number of 1786 seeds / lb (100,000 seeds / 56 lb bu)

¹ In areas of heavy to severe corn rootworm populations, protection will not be adequate. Use only in areas of light to moderate corn rootworm populations. Consult your State Agricultural Extension Service on levels of corn rootworm populations.

² Reduces early season feeding damage.

³ Will reduce feeding damage caused by leaf feeding black cutworms that are 1/2 inch or less in length.

⁴ Reduces feeding damage during emergence and seedling stages.

NOTE: To maintain mg ai / seed, adjust fluid ounces / 100 lb in proportion to the actual seeds / lb compared to the

standard number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 80,000, 140,000) does not need to be adjusted. For example if there are 2800 corn seeds / lb and the targeted rate is 0.0946 mg ai / seed at a non adjusted rate of 1.6 fl. oz / 100 lb. of seed, use: $(2800 + 3000) \times 1.6 = 1.49$ fl. oz / 100 lb of seed.

For End Use Application At Agricultural Establishments

Apply using an HCBT or an Eight-Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water and/or an approved Nufarm fungicide mixture. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50 pound bag of seed. Treat one-half of slurry mix. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50 pound bag of seed following the product application and allow it to distribute evenly on the seed.

Sweet Corn

For Use In Commercial Seed Treatment Facilities

Target Pests:	Fluid Ounces Product / 100 lb seed
Flea beetle Early season corn leaf aphid Seed corn maggot Wireworm	6.4
Imported fire ant Early season corn leaf aphid Seed corn maggot Wireworm	3.2 – 6.4
Imported fire ant Seed corn maggot (seed protection) Wireworm (seed protection)	1.6 – 3.2
Wireworm (seed protection)	0.8 – 1.6

Adjust the final slurry rate to apply 16 to 20 fluid ounces of diluted solution per 100 lb of seed with commercial equipment.

Popcorn

For Use In Commercial Seed Treatment Facilities

Target Pests:	Fluid Ounces Product / 100 lb seed
Flea beetles	6.4

COTTON (Delinted Seed Only):

To provide protection of seedlings against injury by listed pests, apply as a seed treatment at the specified rates.

For Use In Commercial Seed Treatment Facilities

Target Pests:	Fluid Ounces Product / 100 lb seed	MG AI/ SEED
Thrips Aphids	12.8	0.375

For End Use Application At Agricultural Establishments

Apply using an HCBT or an 8-Bag Batch Treater. Shake this product thoroughly before use. This product may be diluted with water or an approved Nufarm fungicide mixture, such as SEBRING 318 FS, for extended disease protection. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50-pound bag of seed. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.

Target Pests:	Fluid Ounces Product / 50 lb bag
Thrips Aphids	6.4

USE RESTRICTIONS:

Regardless of the type of application (seed treatment, soil or foliar): **DO NOT** apply more than a total of 0.5 pound of imidacloprid per acre per calendar year.

CANOLA SEED, RAPESEED, MUSTARD SEED, FLAX SEED, CRAMBE SEED, BORAGE SEED, SUNFLOWER SEED, SAFFLOWER SEED:

To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.

For Use In Commercial Seed Treatment Facilities

Canola, rapeseed, mustard seed:

Target Pests:	Fluid Ounces Product / 100 lb seed
Aphids Flea beetles Wireworms	10.24 – 25.6
In areas where flea beetles and foliar insects are in high numbers, use the higher application rate within the specified range. Consult your local agricultural office for pest patterns, history, and forecasts to assist in determining the appropriate rate for your region.	
For suppression of: 2 nd Generation Lygus bugs, including <i>Lygus</i> spp. Seedpod weevil larvae including <i>Ceutorhynchus assimilis</i>	15.36 – 25.6
Flax*, crambe*, and borage*:	
Target Pests:	Fluid Ounces Product / 100 lb seed
Wireworms Seed corn maggots Flea beetles	25.6
Safflower*:	
Target Pests:	MG AI/ SEED
Wireworms	0.25 – 0.50 (14,200 mg imidacloprid / fluid ounce product)
Sunflower*:	
Target Pests:	MG AI/ SEED
Wireworms Seed corn maggots Flea beetles	0.25 – 0.50 (14,200 g imidacloprid / fluid ounce product)
For End Use Application At Agricultural Establishments	
Apply using an HCBT or a Batch Treater. Shake this product thoroughly before use. This product may be diluted with an approved Nufarm fungicide mixture for extended disease protection. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered.	
Canola, rapeseed, mustard seed:	
Target Pests:	Fluid Ounces Product / 50 lb bag
Aphids Flea beetles Wireworms	5.1 – 12.8
Flax*, sunflower*, crambe*, and borage*:	
Target Pests:	Fluid Ounces Product / 100 lb seed
Wireworms Seed corn maggots Flea beetles	12.8
Safflower*:	
Target Pests:	Fluid Ounces Product / 100 lb seed
Wireworms	12.8
USE RESTRICTIONS: Rape greens grown and harvested from this product's treated seed must not be used for human and feed consumption. Rapeseed grown and harvested from this product's treated seed is only for industrial uses and cannot be used for edible oil or any other human/feed consumption. *Seed treated in California must be destined for planting in states other than California and is not to be planted in California.	

SEED AND POD VEGETABLES (including):	
Adzuki Bean, Asparagus Bean, Broad Bean (Succulent or Dry), Catjang Bean, Chinese Longbean, Field Bean, Guar Bean, Jackbean, Kidney Bean, Labtab Bean, Lima Bean (Succulent or Dry), Moth Bean (Succulent or Dry), Mung Bean, Navy Bean, Pinto Bean, Rice Bean, Runner Bean, Snap Bean, Sword Bean, Tepary Bean, Urd Bean, Wax Bean, Yardlong Bean, Blackeyed Pea (Succulent or Dry), Chickpea, Cowpea (Succulent or Dry), Crowder Pea, Dwarf Pea, Edible-Pod Pea, English Pea, Field Pea, Garden Pea, Green Pea, Pigeon Pea (Succulent or Dry), Snow Pea, Southern Pea (Succulent or Dry), Sugar Snap Pea, Grain Lupin, Sweet Lupin, White Lupin, White Sweet Lupin, Lentil.	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests:	Fluid Ounces Product / 100 lb seed

Wireworm Bean leaf beetle Fire ant Aphids	1.6 -3.2
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USE RESTRICTIONS:
Seed-and-pod vegetable seed treated in California must be destined for planting in states other than California and is not to be planted in California.

SORGHUM:

To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.

For Use In Commercial Seed Treatment Facilities

Target Pests:	Fluid Ounces Product / 100 lb seed
Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane) Chinch bugs Fire ants Wireworms	6.4

For End Use Application At Agricultural Establishments

Apply using an HCBT or an 8-Bag Batch Treater. Shake this product thoroughly before use. Dilute this product with water. Adjust the final slurry rate to apply a rate of 8 to 10 fluid ounces of diluted slurry per 50-pound bag of seed. Treat one-half of seed with one-half of slurry mix. Add the balance of the seed and apply balance of slurry. Allow mixing until seed is thoroughly covered. Apply 0.75 ounce of dry TALC per 50-pound bag of seed following the product application and allow it to distribute evenly on the seed.

Target Pests:	Fluid Ounces Product / 50 lb seed
Aphids (including Corn leaf, English grain, Greenbug, and Yellow sugar cane) Chinch bugs Fire ants Wireworms	3.2

USE RESTRICTIONS:
DO NOT graze or feed livestock on treated areas for 45 days after planting.

SOYBEAN:

To provide early season protection against injury by listed pests and to suppress the spread of certain viruses caused by insect vectors, apply as a seed treatment at the specified rates.

For Use In Commercial Seed Treatment Facilities

Use higher rates within the specified range to provide increased length of protection and for heavy insect pressure. This product can be used as an over-treatment.

Target Pests:	PRODUCT FLUID OUNCES /			MG AI/ SEED
	100 lb seed*	1000 seeds	140,000 seed count	
Seed corn maggot Soybean aphids Bean leaf beetles (overwintering)	1.6 - 3.2	0.0053 - 0.0107	0.75 - 1.50	0.095 - 0.190

This product contains 17,700 mg imidacloprid / fluid ounce.
*based on a standard number of 3000 seeds / lb
NOTE: To maintain mg ai / seed, adjust fluid ounces / 100 lb of seed in proportion to the actual seed count / lb compared to the base number of seeds / lb for that crop; fluid ounces per number of seeds (i.e., 1000, 80,000, 140,000) does not need to be adjusted. For example if there are 2800 soybean seeds / lb and the targeted rate is 0.095 mg ai / seed at a non adjusted rate per 1.6 fl. oz / 100 lb. of seed, use: $(2800 \div 3000) \times 1.6 = 1.4$ fl. oz / 100 lb of seed.

USE RESTRICTIONS:
DO NOT graze or feed livestock on soybean forage or hay.

SUGAR BEETS:

To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.

For Use In Commercial Seed Treatment Facilities	
Target Pests:	Use Rate:
Whitefly Aphids / Leafhoppers (including vectors that may spread Curly top and Yellow mosaic virus) Root aphids Thrips Wireworms	2.4 to 5.0 ounces of this product in or on a unit of pelleted sugar beet seed with a weight ratio of 2:1 pelleting mixture to raw seed (seed count 100,000 seed - approximately 1 kilogram by weight). Apply in a film coat directly to raw seed (100,000 seed or approximately 1 kilogram by weight) at a rate of 2.4 fluid ounces per unit of seed. If rates exceed 2.4 fluid ounces per unit, seed must be pelleted.

Wheat, Barley, Oats, Rye, Triticale:	
To provide early season protection of seedlings against injury by listed pests apply as a seed treatment at the specified rates.	
For Use In Commercial Seed Treatment Facilities	
Target Pests:	Fluid Ounces Product / 100 lb seed
Aphids (including Bird cherry-oat, English grain, Greenburg, and Russian wheat aphid) Hessian fly	0.8 - 2.4
For Suppression of: Wireworm	0.13 - 0.26
Grasshopper	1.2 - 2.4
Use the higher rate within the specified range to provide increased length of protection and to reduce potential spread of Barley yellow dwarf virus due to aphid vectors.	
To reduce early season damage caused by grasshopper, this product's treated seed may be planted as a 50 to 60 foot border around the edges of the field. Consult your local university extension entomologist for details regarding grasshopper control in your area. For maximum effectiveness, seed should be treated uniformly.	
For End Use Application At Agricultural Establishments	
Apply using a Total Slurry Treater (TST), Farmer Applied Seed Treater (F.A.S.T.), Farmer Air Pressure System (FAP) or other on-farm liquid or slurry seed treating equipment to deliver accurate rates of this product to achieve optimum product performance. Combine this product with an approved Nufarm fungicide product for seed and seedling protection against fungal pathogens. Dilution with water may be necessary depending on fungicide formulation used. This product may also be applied on-farm as an over-treatment to seed pretreated with a fungicide. In this case, dilution is necessary.	
Target Pests:	Fluid Ounces Product / 100 lb seed
Aphids (including Bird cherry-oat, English grain, Greenburg, and Russian wheat aphid) Hessian fly	0.8 - 2.4
For Suppression of: Wireworm	0.13 - 0.26
Grasshopper	1.2 - 2.4
USE RESTRICTIONS: DO NOT graze or feed livestock on treated areas for 45 days after planting.	

ADDITIONAL USES:
Stored Seed Protection: When applied according to use directions and at labeled rates equal to or above 1.0 fluid ounce per 100 lb of seed, this product will provide protection to seed against injury from the following insects: Indian Meal Moth (<i>Plodia interpunctella</i>), Rice Weevil (<i>Sitophilus oryzae</i>), Red Flour Beetle (<i>Tribolium castaneum</i>), and Lesser Grain Borer (<i>Rhizopertha dominica</i>). It is recommended that seed with existing populations of stored grain pests be fumigated prior to treating and bagging seed.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool place. **DO NOT** store in direct sunlight. Protect from freezing temperatures.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL [HANDLING]:

[Nonrefillable Containers 5 Gallons or Less]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

[Nonrefillable containers larger than 5 gallons]

Nonrefillable container. DO NOT reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure-rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

[Refillable containers larger than 5 gallons]

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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[Not included in Final Printed Labeling]

LABEL HISTORY

File Name	Revision Mark	Comment
000228-00522.20100405.PRN2007-4	RV040510N	PRN2007-4 update
000228-00522.20100422.MASTER	RV042210	EPA Approval
000228-00522.20110422.Revised_label	RV042211	PRN2007-4 update- additional statements
000228-00522.20110524.MASTER	RV052411	EPA Approval
000228-00522.20120716b.Senator_600FS_DRAFT	RV071612	Reformatted label (tables) - revision to corn & soybean use instructions to include additional rate conversions. Bottom of p. 3 "should" changed to "must."
000228-00522.20120907.MASTER	RV090712	EPA Approval
000228-00522.20141027.DRAFT	RV102714	Revision per EPA request 10/23/2014
000228-00522.20150205.DRAFT	RV020515	Additional Revisions per EPA request 02/05/2015
000228-00522.20150209.MASTER	RV020915	EPA Approval
000228-00522.20150414.DRAFT	RV041415	Notification of ABN